

June 28, 2005

NCHS Research Data Center
3311 Toledo Road, Suite 4113
Hyattsville, MD 20782

To Whom It May Concern:

This letter is to request permission to access of confidential data files through the NCHS Research Data Center. I am the Deputy Director for the Transylvania Health Research Center at the University of Bundesburg funded through the Office of Health Policy. We are currently working on a study using the 2001 National Health Interview Survey. We are interested in merging information from the 2003 Area Resource File to the NHIS data to investigate mental health resource availability for rural and urban children.

Attached you will find the research proposal including abstract, my curriculum vitae, dates of proposed tenure at RDC, a detailed summary of proposed research, a complete list of data requested, user supplied data, software requirements, and shell tables for the report.

Please feel free to contact me at (555) 456-6817 or cresearch@bundesburg.edu if you have any questions.

Sincerely,

Christine M. Research, Ph.D.
Deputy Director
Bundesburg Health Research Center

B. Project Title

Mental Health Risk Factors, Unmet Needs, and Provider Availability for Rural Children

C. Abstract

This study will add to the current knowledge of unmet mental health (MH) needs for rural children and will also address the availability of mental health resources for children with mental health needs.

This study has four objectives:

- (1) To examine the prevalence of sub-clinical MH problems in rural children, including emotional problems, conduct problems, hyperactive behavior, peer relationship difficulties, and lack of prosocial behavior;
- (2) To explore potential risk factors associated with MH problems in American rural children, including age, race, gender, family income, insurance status, and education;
- (3) To assess the influence of local MH provider availability on healthcare provider contact;
- (4) To estimate the number of rural children needing MH care who live in provider shortage areas.

A cross-sectional design will be used focusing on civilian, non-institutionalized children ages 4 to 17. Information in child mental health status will be obtained from the NHIS 2001 Sample Child file (NCHS, 2002). This data set consists of health information for 13,579 sampled children ages 0 to 17 (10,367 children ages 4 to 17). Specific questions relating to development problems in children were added to the Mental Health Supplement in 2001, providing a pre-validated measure of sub-clinical mental health needs. Information about mental health care availability will come from the 2003 Area Resource File. Analysis will be conducted in SAS-callable SUDAAN to take into consideration the complex sampling design employed by the NHIS. The primary variable of interest is rural residence defined as living in a non-Metropolitan Statistical Area (nonMSA). The prevalence of each sub-clinical MH problem will be estimated for rural and urban children. Differences in prevalence will be tested using chi-square tests of independence. We will use multiple logistic regression to investigate the potential confounding effects that demographic variables may have on the association of residence and MH problems. In a secondary analysis, we will subset to rural children only and look at the factors that are correlated with MH problems. Next, among those children having any of the MH problems indicated previously, we will determine if local MH provider availability influences the likelihood of healthcare provider contact. We will also investigate unmet need of mental health care in children identified as having MH problems by comparing the percentages of rural and urban children having seen a mental health professional in the past 12 months. We will estimate the number of rural children needing MH care but not receiving it.

Final report: The final report for this project will focus on the prevalence of mental health problems among rural and urban children. We will attempt to describe the differences in prevalence among rural minority children. We will also present factors

associated with unmet need of mental health care and availability of mental health professionals in rural and urban areas.

D. Full personal identification and institutional affiliation:

Christine M. Research is the Deputy Director of the Health Research Center at the University of Bundesburg (UB). She is also a Research Assistant Professor in the Department of Epidemiology and Biostatistics in the Kaiser School of Public Health at UB.

E. Curriculum Vitae

(Current biosketch attached)

F. Dates of proposed tenure at RDC.

December 15-19, 2005

G. Source of Funding

Office of Rural Health Policy: Grant Number 5 Y1F RZ 00046-08

H. Detailed summary of proposed research including description of why publicly available data are insufficient.

The proposed research will address sub-clinical mental health problems and mental health service availability in children. The publicly available Strengths and Difficulties Questionnaire (SDQ), included in the 2001 NHIS Sample Child file, will be used to identify sub-clinical mental health problems. Mental health resource availability is provided at the county level in the Area Resource File (ARF). We propose estimating the number of children living in rural areas (defined by non-Metropolitan Statistical Area) that need mental health services but live in areas where they are not available using data from the 2003 Area Resource File (ARF 2003). We have also proposed to determine if local mental health provider availability (ARF 2003) influences the likelihood of health care provider contact (NHIS 2001). The NHIS 2001 does not contain information on availability of mental health resources where each child resides. For this reason, we are requesting to link data from the Area Resource File to each sample child so that we can address lack of mental health resources. The Area Resource File contains information at the county level and can be identified via state and county FIPS codes. Previous contact with the staff at RDC confirmed the NHIS data could be linked to the ARF at the county level by the FIPS code identifier.

I. Complete list of the NCHS data requested-data system, files, years, variables.

Data system:

Data file: NHIS 2001 Sample Child File

Variables: All publicly available variables will need to be used when identifying children with sub-clinical mental health problems and the resources available in their county of residence. Specific variables of interest for this study include:

Variables from NHIS	Variable Names (SC=Sample Child file, P=Person file)
<i>Recognized mental health needs –</i>	
Parents ever told by health professionals that their child has one of the following conditions: a learning disability, Down’s syndrome, autism, mental retardation, or any other developmental delay.	LEARND (SC) CONDL1 (SC) CONDL6 (SC) AMR2 (SC) AODD2 (SC)
During the past 12 months, the parent has seen or talked to a mental health professional about their child. Mental health professional includes psychiatrist, psychologist, psychiatric nurse, and clinical social worker.	CHCSYR1 (SC)
Did you see or talk to this general doctor because of an emotional or behavioral problem that --- may have? (Among respondents with CHCSYR82=1)	CHCSYREM (SC)
During the past 12 months, the parent needed mental health care or counseling for the child but was unable to afford it.	CHCAFYR2 (SC)
<i>Sub-clinical mental health problems –</i> measured by the Strengths and Difficulties Questionnaire (SDQ). The first part of the SDQ consists of 25 scale items that can be used to create five subscales that measure emotional symptoms, conduct problems, hyperactive behavior, peer relationships, and prosocial behavior. The second part of the SDQ can be used to assess duration and impact of symptoms.	CSCL1_S1 (SC) CSCL1_S2 (SC) CSCL1_H1 (SC) CSCL1_E1 (SC) CSCL1_C1(SC) CSCL2_P1 (SC) CSCL2_C2 (SC) CSCL2_E2 (SC) CSCL2_S3 (SC) CSCL2_H2 (SC) CSCL3_P2 (SC) CSCL3_C3 (SC) CSCL3_E3 (SC) CSCL3_P3 (SC) CSCL3_H3 (SC) CSCL4_E4 (SC) CSCL4_S4 (SC) CSCL4_C4 (SC) CSCL4_P4 (SC) CSCL4_S5 (SC)

	CSCL5_H4 (SC) CSCL5_C5 (SC) CSCL5_P5 (SC) CSCL5_E5 (SC) CSCL5_H5 (SC) CSCL6-CSCL8 (SC) CSCL9_HL (SC) CSCL9_FR (SC) CSCL9_CL (SC) CSCL9_LA (SC) CSCL10 (SC)
<i>Mental health risk factors –</i>	
Parental mental health, measured by depression, anxiety, or emotional problems that cause limitations.	LAHCA17 (P)
<i>Demographic characteristics of the child</i>	
Age: subsetting to ages 4 to 17	AGE_P (SC)
Race: defined as Hispanic, Non-Hispanic White, Non-Hispanic African American, Non-Hispanic Other	HISCOD_I (SC)
Rural residence: defined as living in Metropolitan Statistical Area (MSA) or non-MSA	MSASIZEP (SC)
Sex of child	SEX (SC)
Family income: defined as above or below \$20,000	AB_BL20K (SC)
Insurance status: defined as private, Medicaid, or none	PRIVATE (P) MEDICAID (P) NOTCOV (P)
Highest education level of parent/parents: defined as having high school education or not	MOM_ED (SC)
Region of residence: Northeast, Midwest, South, and West	DAD_ED (SC)
Household composition: single parent or not single parent	FM_STRCP (SC)
Usual source of care	CUSUALPL (SC)

J. Details concerning user supplied data to be merged with the NCHS data. Include documentation, file layout, number of records, and restriction on NCHS using the data.

Area Resource File (2003): Data are in a .txt file with a .SAS program (ARF0203.sas). Applicant will send to RDC upon acceptance of application.

RECORD LENGTH = 31871
BLOCKSIZE = 31871
OF RECORDS = 3225

This file contains information at the county level. All variables in the data set can be read-in with the program supplied. Variables we will be using for analyses include:

Variables from Area Resource File (2003)	Variable (fields in .txt file)
FIPS Code	F00002 (00002-00006)
FIPS State Code	F00011 (00122-00123)
FIPS County Code	F00012 (00124-00126)
Census Population (2000)	F04530-00 (19318-19325)
Total Active MDs, Non Federal (2001)	F08857-01 (00507-00511)
MDs, Total Patient Care, Non Federal (2001)	F11215-01 (00780-00784)
MDs, Total General Pract, Total, Non Fed (2001)	F04610-98 (01443-01447)
MDs, Total General Pract, Total Patient Care, Non Fed (2001)	F11069-01 (01458-01462)
MDs, Total Gen Pract, Total Non Fed (2001)	F09947-01 (01612-01616)
MDs, Total Gen Pract, Pat Care, Non Fed (2001)	F11072-01 (01627-01631)
Child Psychiatrist Total (2001)	F04748-01 (05117-05121)
Child Psychiatrist Patient Care (2001)	F11160-01 (05132-05136)
Psychiatry Total (2001)	F04773-01 (06029-06033)
Psychiatry Patient Care (2001)	F11181-01 (06044-06048)
Psychologists (1990)	F12495-90 (13297-13302)
Social Workers (1990)	F12498-90 (13309-13314)
# Psychiatric Short Term Hospitals (2001)	F13185-01 (13547-13548)
# Short Term Community Hospitals (2001)	F08872-01 (13571-13573)
# Short Term AOHA Hospitals (2001)	F11379-01 (13589-13591)
# Rehabilitation Short Term Hospitals (2001)	F13186-01 (13549-13550)
# Children's Psych Short Term Hospitals (2001)	F13187-01 (13551-13552)
# Psychiatric LT Hospitals (2001)	F10678-01 (13556-13558)
# Rehabilitation LT Hospitals (2001)	F10679-01 (13559-13561)
#Community Mental Health Centers (2001)	F13221-01 (16516-16520)
# Rural Health Clinics (2001)	F13218-01 (16456-16460)
# Hosp with Psychiatric Care (2001)	F12574-01 (14871-14873)
# Fed Qualified Health Centers (2001)	F13320-01 (16541-16545)
# Hosp with Child Wellness (2001)	F12588-01 (14922-14924)
# Hosp with Alcohol and Drug Abuse Outpatient Services (2001)	F12580-01 (14892-14894)
# Hosp with Teen Outreach Services (2001)	F12637-01 (15093-15095)
# Hosp with Child/Adolescent Psychiatric Services (2001)	F12616-01 (15027-15029)

K. Software requirements: SAS and SUDAAN, possibly Microsoft Word for typing up results.

L. Shell tables for report

PUBLICLY AVAILABLE: data analysis on all publicly available data will be performed at the University of Bundesburg Research Center

NOT PUBLICLY AVAILABLE: data analysis will be conducted at the Research Data Center at NCHS

PUBLICLY AVAILABLE: Demographic characteristics of US children 4-17 (NHIS 2001)

Urban	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Age					
4-8					
9-11					
12-14					
15-17					
Sex (Male)					
Family Income (below \$20,000)					
Health Insurance					
Private					
Public					
Parental Education (HS or more)					
None					
Region of residence					
Northeast					
Midwest					
South					
West					
Household composition					
Single parent					
Not single parent					

PUBLICLY AVAILABLE: Demographic characteristics of US children 4-17 (NHIS 2001)

Rural	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Age					
4-8					
9-11					
12-14					
15-17					
Sex (Male)					
Family Income (below \$20,000)					
Health Insurance					
Private					
Public					
Parental Education (HS or more)					
None					
Region of residence					
Northeast					
Midwest					
South					
West					
Household composition					
Single parent					
Not single parent					

PUBLICLY AVAILABLE: Mental health utilization and mental health needs of US children 4-17 (NHIS 2001)

Urban	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Ever told: learning disability, Down's syndrome, autism, mental retardation, or any other developmental delay					
During past 12 months...					
Parent has seen or talked to MH professional about child.					
Parent needed mental health care or counseling for child but was unable to afford it.					
Did you see or talk to this general doctor because of an emotional or behavioral problem that - - may have?					
Rural	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Ever told: learning disability, Down's syndrome, autism, mental retardation, or any other developmental delay					
During past 12 months...					
Parent has seen or talked to MH professional about child.					
Parent needed mental health care or counseling for child but was unable to afford it.					
Did you see or talk to this general doctor because of an emotional or behavioral problem that - - may have?					

PUBLICLY AVAILABLE: Sub-clinical mental health problems and mental health risk factors of US children 4-17 (NHIS 2001)

Urban	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Abnormal score					
Emotional symptoms					
Conduct problems					
Hyperactive behavior					
Peer relationships					
Present behavior					
Parental history of mental health					
Rural	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Abnormal score					
Emotional symptoms					
Conduct problems					
Hyperactive behavior					
Peer relationships					
Present behavior					
Parental history of mental health					

NOT PUBLICLY AVAILABLE: Mental health care availability of US children 4-17 (NHIS 2001)

Urban	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Average practitioner/population ratio					
MDs, Total Patient Care (Non Federal)					
MDs, Total General Pract, Patient Care (NF)					
Psychiatrists, Total Patient Care					
Child Psychiatrists					
Social workers					
Any of above					
Presence of the following in the county of residence					
Psychiatric Short Term Hospitals					
Short Term Community Hospital					
Short Term AOHA Hospital					
Rehabilitation Short Term Hospitals					
Children's Psych Short Term Hospitals					
Psychiatric LT Hospitals					
Rehabilitation LT Hospitals					
Community Mental Health Centers					
Rural Health Clinic					
Hosp with Psychiatric Care					
Federally Qualified Health Center					
Hosp with Child Wellness					
Hosp with Alcohol and Drug Abuse Outpatient Services					
Hosp with Teen Outreach Services					
Hosp with Child/Adolescent Psychiatric Services					

NOT PUBLICLY AVAILABLE: Mental health care availability of US children 4-17 (NHIS 2001)

Rural	Total	White	Hispanic	African American	Other
Un-weighted count					
Weighted population estimate					
Average practitioner/population ratio					
MDs, Total Patient Care (Non Federal)					
MDs, Total General Pract, Patient Care (NF)					
Psychiatrists, Total Patient Care					
Child Psychiatrists					
Social workers					
Any of above					
Presence of the following in the county of residence					
Psychiatric Short Term Hospitals					
Short Term Community Hospital					
Short Term AOHA Hospital					
Rehabilitation Short Term Hospitals					
Children's Psych Short Term Hospitals					
Psychiatric LT Hospitals					
Rehabilitation LT Hospitals					
Community Mental Health Centers					
Rural Health Clinic					
Hosp with Psychiatric Care					
Federally Qualified Health Center					
Hosp with Child Wellness					
Hosp with Alcohol and Drug Abuse Outpatient Services					
Hosp with Teen Outreach Services					
Hosp with Child/Adolescent Psychiatric Services					

PUBLICLY AVAILABLE: Factors associated with sub-clinical MH problems among rural children.

Rural	Emotional	Conduct	Hyperactive	Peer relationships	Prosocial Behavior
Un-weighted count					
Weighted population estimate					
Race/ethnicity					
Hispanic					
Non-Hispanic White					
Non-Hispanic Black					
Non-Hispanic Other					
Age					
4-8					
9-11					
12-14					
15-17					
Sex (Male)					
Family Income (below \$20,000)					
Health Insurance					
Private					
Public					
Parental Education (HS or more)					
None					
Region of residence					
Northeast					
Midwest					
South					
West					
Household composition					
Single parent					
Not single parent					

NOT PUBLICLY AVAILABLE: Utilization and resource availability among rural children with sub-clinical MH problems.

Among rural children with.....	Emotional Problems	Conduct Problems	Hyperactive Problems	Peer relationships Problems	Prosocial Behavior Problems	Any sub-clinical problem
Un-weighted count						
Weighted population estimate						
During past 12 months...						
Parent has seen or talked to MH professional about child.						
Parent needed mental health care or counseling for child but was unable to afford it.						
Did you see or talk to this general doctor because of an emotional or behavioral problem that - - may have?						
Average practitioner/population ratio						
Federal Total Patient Care (Non						
MDs, DOs, (NP) Total General Pract, Patient						
MDs, (NP) Child Psych, Psychiatrist, Patient Care						
Psychiatrists, Child Psych, Social workers						
Any of the above						
Presence of the following in the county of residence						
Psychiatric Short Term Hospitals						
Short Term Community Hospital						
Short Term AOHA Hospital						
Rehabilitation Short Term Hospitals						

Children's Psych Short Term Hospitals						
Psychiatric LT Hospitals						
Rehabilitation LT Hospitals						
Community Mental Health Centers						
Rural Health Clinic						
Hosp with Psychiatric Care						
Federally Qualified Health Center						
Hosp with Child Wellness						
Hosp with Alcohol and Drug Abuse Outpatient Services						
Hosp with Teen Outreach Services						
Hosp with Child/Adolescent Psychiatric Services						

NOT PUBLICLY AVAILABLE: Utilization and resource availability among rural children with sub-clinical MH problems.

Rural	Any sub-clinical problems with any utilization	Any sub-clinical problems without utilization
Un-weighted count		
Weighted population estimate		
Average practitioner/population ratio		
MDs, Total Patient Care (Non Federal)		
MDs, Total General Pract, Patient Care (NF)		
Psychiatrists, Total Patient Care		
Child Psych Patient Care		
Social workers		
Any of above		
Presence of the following in the county of residence		
Psychiatric Short Term Hospitals		
Short Term Community Hospital		
Short Term AOHA Hospital		
Rehabilitation Short Term Hospitals		
Children's Psych Short Term Hospitals		
Psychiatric LT Hospitals		
Rehabilitation LT Hospitals		
Community Mental Health Centers		
Rural Health Clinic		
Hosp with Psychiatric Care		
Federally Qualified Health Center		
Hosp with Child Wellness		
Hosp with Alcohol and Drug Abuse Outpatient Services		
Hosp with Teen Outreach Services		
Hosp with Child/Adolescent Psychiatric Services		